

APPLICATION FOR UNITED STATES PATENT

in the name of

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for

UNEMPLOYMENT INSURANCE MANAGEMENT

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UNEMPLOYMENT INSURANCE MANAGEMENT

CLAIM OF PRIORITY

This application claims priority under 35 U.S.C. § 119(e) to U.S. Provisional Patent Application Serial No. 60/432,845, filed on December 12, 2002, the entire contents of which are hereby incorporated by reference.

TECHNICAL FIELD

This document generally relates to an unemployment insurance method and system.

BACKGROUND

Many state unemployment insurance agencies manage their unemployment insurance (“UI”) programs using multiple computer systems and workforces. A first workforce uses a first computer system and database to handle requests from claimants seeking UI benefits. A second workforce uses a second computer system and database to manage UI tax collection from employers. The first and second computer systems and databases are “silo’ed,” meaning that they have limited or no interfaces with each other.

These separate computer systems and workforces often create duplication of data and errors in data processing. In addition, such separate computer systems prevent a UI agency worker from having a complete picture when dealing with either a claimant seeking benefits or an employer seeking to pay taxes, which increases the chances that incomplete or inaccurate information will be provided to the claimant or employer. Moreover, having two separate workforces to handle two different computer systems results in inefficient utilization of human resources. Finally, because the benefits and tax systems are managed separately, many state agencies have difficulty detecting fraud, overpayment of UI benefits and underpayment of tax.

SUMMARY

A system for handling UI is disclosed. The system includes a unified database containing UI benefit data and UI tax data. The UI benefit data includes a benefit status of a claimant and the UI tax data includes a tax payment status of an employer associated with the claimant. The system also includes a functional layer that is configured to evaluate a request for a UI benefit by

the claimant based on the benefit status of the claimant and the tax payment status of the employer. Implementations may include one or more of the following features.

For example, the unified database may include a data manager configured to manage the UI benefit data and the UI tax data. The system also may include an access channel configured to allow a user access to the unified database and to the functional layer. The access channel may include a telephone contact center configured to receive telephone calls from a user. The access channel also may include a web self-service center configured to communicate with a user over a computer network. In addition, the access channel may include an optical character recognition module configured to scan a paper document received from a user and convert information on the paper document to computer readable data.

The system further may include a unified desktop that is configured to allow a worker to manage the UI benefit data, the UI tax data, and the functional layer. The unified desktop may enable the worker to manage the request for the UI benefit by the claimant. The unified desktop also may enable the worker to manage a payment of a UI tax by the employer. The unified desktop further may include one or more pop-up screens that provide information to the worker and one or more predetermined scripts for use by the worker.

In addition, the system may include a web page interface configured to receive a web-based communication from a user or to send a web-based communication to a user. The web page interface may include one or more web pages configured to enable the claimant to submit the request for the UI benefit. The web page interface also may include one or more web pages configured to enable the employer to manage a UI tax.

Furthermore, the system may include a reporting layer that is configured to generate a report based on the UI benefit data and the UI tax data. The report may include at least one of an employer balance due report, an employer monthly benefits charge statement, an employer determination of benefits report, a claimant claim history report, a claimant job referral report, a performance metrics report, a notice, an identification of claimant discrepancy report, and an identification of agency discrepancy report.

The system also may include an external system interface configured to communicate with an external agency. The external agency may be a state agency and a federal agency.

The functional layer further may be configured to receive the request for the UI benefit, to send a notification to the employer associated with the claimant indicating that the claimant is

seeking the UI benefit, and to receive a response from the employer to the notification. The functional layer also may be configured to update the unified database based on the response from the employer. In addition, the functional layer may be configured to check the benefit status of the claimant, to check the tax payment status of the employer, and to issue the UI benefit to the claimant if the claimant is eligible for the UI benefit. Further, the functional layer may be configured to receive an update of the benefit status of the claimant and to evaluate whether to terminate the UI benefit. The functional layer also may be configured to determine whether the request for the UI benefit is fraudulent based on a tax payment status of a second employer associated with the claimant.

In addition, the functional layer may be further configured to receive tax information regarding taxes owed by the employer and to update the UI tax data with the tax information. The functional layer also may be configured to receive wage information regarding wages paid by the employer and to update the UI tax data with the wage information. The functional layer may be configured to calculate an amount of UI tax owed or credit earned by the employer based upon the wage information and to notify the employer of the amount of UI tax owed or credit earned by the employer.

The functional layer further may be configured to register an employer, to notify an employer of a delinquent tax payment, to perform a wage investigation, to make an adjustment to a tax of the employer, and to generate a notice of the adjustment. In addition, the functional layer may be configured to manage an employer insolvency, process a UI benefit payment, to notify a claimant of a UI benefit overpayment, to account for a benefit payment, and to perform an audit.

In another implementation, a system for handling UI may include UI benefit data including a benefit status of a claimant, UI tax data including a tax payment status of an employer associated with the claimant, and a unified desktop that is configured to process a function related to a UI benefit for the claimant and a function related a UI tax for the employer, based on the benefit status of the claimant and the tax payment status of the employer.

In various implementations, the disclosed system may provide one or more of the following advantages. The unified database unifies data on benefits, wages, tax payments and benefits payment control into one unified database, eliminating the need for duplicate fields among separate databases and, consequently, improving the data storage and processing

efficiencies. The unified desktop provides UI agency workers with complete information on both claimants and employers, increasing the efficiency of the workers and reducing the probability of error. The unified database and unified desktop increase efficiency and accuracy by providing a worker with the most current information on a claimant's claims for UI benefits and an employer's information on employees names, wages paid, taxes paid and any credits or additional amounts due. Thus, the benefits and tax components of a UI program are combined and implemented by one system, handled by workers in one department.

The disclosed system also allows claimants and employers to enter and access data by a wide variety of access channels, including the Internet, mail, facsimile, telephone, and interactive voice recognition (IVR). By integrating these channels, the disclosed system increases efficiency by allowing claimants and employers to access and update data without the assistance of a worker in the UI agency. These access channels also provide checks to ensure that data is entered in a complete and accurate manner, to reduce the number of call-backs to obtain additional information.

These general and specific aspects may be implemented using a system, a method, or a computer program, or any combination of systems, methods, and computer programs. Other features will be apparent from the description and drawings, and from the claims.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a block diagram of an implementation of a UI system.

FIG. 2 is a detailed block diagram of an implementation of a UI system.

FIG. 3 is a block diagram of a computer system for implementing a UI system.

FIG. 4 is a screen shot of an exemplary introductory web page.

FIGS. 5A-5H are screen shots of an exemplary UI claim form.

FIGS. 6A-6K are screen shots of an exemplary employer registration form.

FIGS. 7A and 7B are screen shots of an exemplary employer separation information request form.

FIG. 8 is a screen shot of an exemplary employer request for protest/appeal form.

FIG. 9 is a screen shot of an exemplary employee wage report form.

FIG. 10 is a screen shot of an exemplary employer tax balance due report.

FIG. 11 is a screen shot of an exemplary employer tax payment form.

FIG. 12 is a block diagram of the mapping of the unified database.

FIG. 13 is a screen shot of an exemplary employer monthly tax statement.

FIG. 14 is a screen shot of an exemplary determination of benefits report.

FIG. 15 is a screen shot of an exemplary claimant's claim history report.

5 FIG. 16A and 16B are screen shots of an exemplary job referral report.

Like reference symbols in the various drawings indicate like elements.

DETAILED DESCRIPTION

10 A system and method for handling UI is disclosed. The system includes a unified database containing UI benefit data and UI tax data where the UI benefit data and the UI tax data are unified into unified data. The system may include a unified desktop that is configured to allow a worker to manage the UI benefit data and the UI tax data. The system enables a worker to manage a claim for UI benefits and an employer's UI tax.

15 FIG. 1 is a block diagram 10 of a UI system 12. UI system 12 is configured to provide a UI agency 18 and its workers a single system for processing a claimant's 16 request for UI benefits and for processing an employer's 14 UI requirements, such as UI tax payments. UI system 12 may be configured to handle all UI functions related to the claimant 16 and the employer 14 and to facilitate communication with and among the UI agency 18, the employer 14, and the claimant 16 over one or more communication channels.

20 FIG. 2 is a more detailed view of UI system 12 shown in FIG. 1. UI system 12 includes access channels 20, presentation layer 60, business layer 70, data layer 80, and reporting layer 90.

25 UI agency 18, employer 14 and claimant 16 interact with UI system 12 through one or more access channels 20. UI agency 18 communicates through one or more of its employees, contractors or other workers, referred to herein as knowledge workers 19. Access channels 20 allow employers 14, claimants 16, and knowledge workers 19, to communicate with one another and to access the UI system 12 through one or more communication means.

30 In one implementation of access channels 20, employer 14 or claimant 16 can communicate with UI system 12 through a telephone contact center 30. Employer 14 or claimant 16 calls telephone contact center 30 through using a telephone 31 over a public switched telephone network (PSTN) 32. Telephone contact center 30 includes an interactive voice

response (IVR) module 33 that automatically prompts the caller to provide information by depressing a touchtone keypad or speaking into telephone 31. In one exemplary implementation, this information is automatically processed to UI system 12 using a computer telephone integration (CTI) module 34 linked with a customer relationship management (CRM) solution

5 35. In another exemplary implementation, knowledge worker 19 listens to the call and processes the information manually on a computer terminal 36. As discussed below, this manual processing can be facilitated by screen pops 37 on computer terminal 36.

In another exemplary implementation of access channels 20, employer 14 or claimant 16 can communicate with UI system 12 through a web self-service center 40. Web self-service

10 center 40 can be accessed over the Internet 42 by a personal computer 41 or other device having Internet access. Web self-service center 40 includes a web server 43 and a web self-service application 44 that facilitates access to UI system 12. Web self-service center 40 permits claimant 16 and employer 14 to enter, update and access their respective information from data layer 80. Web self-service center 40 allows the use of user identifications and passwords to

15 restrict access to data, permitting employer 16 or claimant 14 access to their records outside of normal business hours. Web self-service center 40 also permits knowledge workers 18 to have remote access to UI system 12, based on the worker's authorization. In addition, web self-service center 40 may be used to allow other government agencies access to unified database 81, such as, to pull information off of UI system 12. As described in more detail below, web self

20 center 40 interacts with UI system 12 through, for example, ASP.NET technology, to allow users to establish, enter, update and access information in a secure setting that protects the information from accidental exposure.

In yet another implementation of access channels 20, employer 14 or claimant 16 can communicate with UI system 12 through an optical character recognition/intelligent character

25 recognition (OCR/ICR) module 50. OCR/ICR module 50 can be accessed through an input document 51 sent by fax 52 or by mail. The input 51 document is scanned using an optical character recognition scanner 53 that converts the scanned image into electronic computer readable data. OCR/ICR module 50 provides for recognition of typed and handwritten characters, including recognition of non-standard characters. As discussed below, the data is

30 transferred to the UI system 12 by an image processing module 65 in presentation layer 60.

In other implementations of access channels 20, information can be communicated using electronic mail, facsimile, traditional mail, visits to the UI office, or other communications means.

Presentation layer 60 includes a unified desktop interface 100, a web page interface 200, and an image processing module 65. Unified desktop 100 includes a user interface that assists knowledge worker 19 in interacting with and receiving communications from claimant 16 and employer 14 through access channels 20, such as through telephone contact center 30. Unified desktop 100 is linked to business layer 70 to facilitate knowledge worker 19 initiating or performing business functions related to claimant 16 and employer 14, which are described in greater detail below. Unified desktop 100 also interfaces with data layer 80 to facilitate knowledge worker 19 retrieving and updating data in unified database 81, which is described in greater detail below. Thus, by using unified desktop 100, a single knowledge worker 19 is able to manage all functions of UI system 12 related to both claimants 16 and employers 14 that are discussed below.

In an implementation, unified desktop 100 is implemented by a customer relationship management (CRM) software package 110 with a web-browser based graphical user interface, such as a software package based on Windows® NT technology and driven by Microsoft® .NET programming packages. Unified desktop 100 also is coupled to IVR module 33 and CTI module 34 of telephone contact center 30 to provide information to unified desktop 100. When a caller calls the telephone call center 30, unified desktop 100 presents knowledge worker 19 with one or more pop-up screens that provide information automatically gathered from telephone contact center 30 and from unified database 81 related to the caller. Unified desktop 100 also presents knowledge worker 19 with one or more pop-up screens that contain predetermined scripts to assist knowledge worker 19 in addressing the needs of the caller, whether the caller is a claimant 16 or an employer 14. Unified desktop 100 includes “front-end” edits that verify data inputted by knowledge worker 19, such as social security number, address, and employment history, and prompts knowledge worker 19 to confirm any change to that information or notifies knowledge worker 19 if an entry is not valid. In addition, unified desktop 100 permits knowledge worker 19 to review all prior contacts between claimant 16, employer 14, and UI agency 18.

For example, unified desktop 100 can be used to process a claimant’s 14 call to telephone call center 30 to file a claim for unemployment insurance. This process is described as part of

Example 1 below. In this implementation, IVR module 33 and CTI module of 34 collect basic information, such as date of termination of employment, date of birth, and social security number. This information is matched up with data from unified database 81, including data related to claimant's employer and payment of UI taxes. All of this information may be presented to knowledge worker 19 through unified desktop 100. Next, unified desktop 100 presents knowledge worker 19 with pop-up screens containing a script to collect the necessary information to process the claimant's claim. As knowledge worker 19 collects additional information, 19 knowledge worker inputs the information into appropriate fields in the pop-up screens. Unified desktop 100 may include checks to prevent knowledge worker 19 from entering patently incorrect information or from skipping necessary information. Once knowledge worker 19 has collected all necessary information to process claimant's claim, unified desktop 100 saves the information in unified database 81 and initiates the business function to file and process the claim. Unified desktop 100 may be used to facilitate initiation of other business functions, some of which are described in greater detail below. In some instances, claimant 16 or employer 14 may contact knowledge worker 19 through telephone call center 30 but may not have enough information to provide to knowledge worker 19 in order to complete a transaction using unified desktop 100. In such instances, the incomplete information may be stored in unified database 81 pending completion of the file.

In addition, unified desktop 100 may include reminders about when claimant 16 needs to call back to provide follow-up data and answers to frequently asked questions. Unified desktop 100 may further include a scratch pad that permits knowledge worker 19 to enter temporary data for use during a call, such as a telephone number for the caller in the event the call is unintentionally disconnected. In an implementation, unified desktop 100 permits knowledge worker 19 to save information that claimant 16 or employer 14 is assuming for purpose of the call, but should not be entered into unified database 81. For example, unified desktop 100 may facilitate working through a "what if" scenario when claimant 16 asserts that some qualifying employment is not in UI system 12 and provides approximate dates of work and salary.

Unified desktop 100 efficiently addresses the caller's needs while minimizing the number of calls required to process a caller's requests. In addition, unified desktop 100 enables knowledge worker 19 to respond to calls from either employers 14 or claimants 16 in a timely and accurate manner, reducing the need to transfer a call, reducing call waiting time for callers,

and improving the efficient use of knowledge workers 19 in the face of shrinking government budgets to fund the UI process.

Presentation layer 60 further includes web page interface 200 that facilitates direct communication between UI system 12 and employer 14 or claimant 16 over the Internet. The dynamic web page interface may be built, for example, from Microsoft® Active Server Page (ASP.NET) technology. Web page interface 200 permits employer 14 and claimant 16 to initiate, process, and review business processes in business layer 70, to establish, enter, update and access data in data layer 80, and to generate and receive reports from reporting layer 90. Web page interface 200 includes a series of web-based documents and forms that are dynamically generated based on input by employer 14 or claimant 16 and from execution of processes in business layer 70, retrieval of data from data layer 80, and generation of reports from reporting layer 90.

Exemplary screen shots of an implementation of web page interface 200 are shown in Figs. 4-11. Fig. 4 depicts a screen shot of a welcome screen 210 seen when employer 14 or claimant 16 logs on to web self-service center 40 run by state UI agency 18. Welcome screen 210 includes hyperlinks 216 for claimants 16, for example, to find a job or file a claim for UI benefits. Welcome screen 210 also includes hyperlinks 214 for employers 14, for example, to register with UI agency 18, to pay UI taxes, or to protest a UI claim by a claimant.

Figures 5A-5H depict screen shots of a form 220 that allows claimant 16 to file a claim for UI benefits. Form 220 guides claimant 16 through a series of questions and receives information from claimant 16 in order to process claim. As shown in Figs. 5E, a portion of form 220 allows claimant to search the unified database 81 for an employer for which the claimant 16 previously worked.

Figs. 6A-6K depict screen shots of an employer registration form 230 that allows employer 14 to register with UI agency 18 for purposes of paying UI taxes and monitoring UI claims. FIGS. 7A-7B depict an employer questionnaire 240 for employer 14 to complete after claimant 16 files a claim against employer for unemployment benefits. Fig. 8 depicts an employer request for protest/appeal 250 for employer 14 to complete if employer 14 wishes to protest a claimant's claim for UI benefits. Fig. 9 depicts a form 260 for employer 14 to report the amount of wages paid to its employees for purposes of calculating the amount of UI tax due.

Fig. 10 depicts a report 270 of the amount of UI tax due. Fig. 11 depicts a form 280 for allowing employer 14 to make an electronic payment of UI tax.

Referring back to Fig. 2, presentation layer 60 further includes image processing module 65 that interacts with OCR/ICR module 50 to handle mail, facsimiles, and other documents received by UI agency 18. As discussed above, the mail, facsimiles, and other documents may be received and scanned using an optical character recognition scanner 53 that converts the scanned image into computer readable data. Image processing module 65 processes this data through business interfaces and transmits the data for storage in data layer 80.

Business layer 70 includes UI benefits, tax and wage functional areas 72, application architecture 74 and an external systems interface 76. Application architecture 74 is programmed to implement UI benefits, tax and wage functional areas 72 to perform a wide range of business functions related to management and implementation of unemployment insurance. As shown in Fig. 2, business functions in the UI benefits, tax and wage functional areas 72 include, but are not limited to, the following: filing and processing claims for UI benefits; accounting for UI benefit payments; collecting overpayments of benefits to claimants; mailing and managing claimant files; processing claimant benefit payments; registering an employer; computing and collecting employer tax payments; collecting delinquent employer tax payments; performing wage investigations; making monetary adjustments; performing audits; performing corporate accounting; monitoring insolvency; making non-monetary adjustments; generating wage and tax reports; and general management and monitoring, including generation of regular and special reports, performance metrics on knowledge workers, and monitoring data on calls for quality management. Several of these business functions are discussed in the examples below. Because UI laws vary from jurisdiction to jurisdiction, the business functions will vary based on the needs of the laws a particular jurisdiction.

Application architecture 74 implements UI benefits, tax and wage functional areas 72 by integrating features of one or more commercial off-the-shelf (COTS) software packages, which may be tailored to help the system operate efficiently. For example, as shown in Fig. 2, application architecture 74 is based on Microsoft® ASP.NET, Siebel® CRM, Microsoft® Internet Information Server (IIS) 5.0, Microsoft® Message Queue-Server, Avanade Connected Architectures for .NET (ACA.NET), Web Services/XML, Microsoft® Windows Advanced Server, Siebel® Business Objects, and Microsoft® Application Center 2000. It should be

understood that a wide variety of other COTS may be used to build application architecture 74 in order to implement UI benefits, tax and wage functional areas 72.

External systems interface 76 allows UI system 12 to interface with existing external systems operated by UI agency 18, as well as systems operated by other state agencies, by the federal government, and by private industry. For example, interfaces with external systems may be used to process UI benefits payments, to implement collection and deposit of tax receipts as well as their proper accounting, and to assist in audits and review of tax collections and benefits payments.

Data layer 80 is responsible for managing the data needs of the system 12. Data layer includes a unified database 81 that contains UI benefit data 82, including data related to benefit claims 82a and data benefit payments control (BPC) 82b. Unified database 81 also contains UI tax data 84, including data related to tax payments 84a and data related to wage payments 84b. Benefit data 82 and tax data 84 are unified into a single set of unified data 85. Unified database 81 includes a data manager 86 configured to manage the unified data 85 in unified database 81. For example, in the implementation shown in Fig. 2, the data manager 86 is a Microsoft® Structured Query Language (SQL) server product. It will be understood unified database 81 can be built and managed with a wide variety of other COTS software and hardware data management packages.

As shown in Fig. 12, in an implementation, unified database 81 is built by mapping benefit data 82 from an existing benefit database 901 and tax data 84 from an existing tax database 902 onto unified database 81. While much of the benefit data 82 and the tax data 84 is distinct, some of the benefit data 82 and the tax data 84 overlaps. For example, employer contact information, claimant contact information, and wage payment information is part of both benefit data 82 and tax data 84. In unifying benefit data 82 and tax data 84 into unified data 85, this duplicate information may be consolidated and eliminated.

By unifying benefit data 82 and tax data 84, unified database 81 eliminates the need for maintaining shared files in two separate locations on separate databases, eliminates the need to enter data twice (once for benefits and once for tax), reduces the opportunity for errors during data entry, and reduces overall system requirements for data storage.

Referring back to Fig. 2, reporting layer 90 is configured to generate reports related to UI system 12. UI system 12 provides the UI agency with various reports on a regular and ad hoc

basis. These reports can be provided in print form, by facsimile, by electronic mail, over the Internet, or by any other suitable communications means. In the implementation depicted in Fig. 2, reporting layer 90 is implemented by Crystal Reports and/or Seibel Reports. However, it will be understood that the reports can be generated by any suitable software or hardware package.

5 Examples of reports include: (1) Employer Balance Due; (2) Employer Monthly Benefits Charge Statement; (3) Employer Determination of Benefits; (4) Claimant Claim History; (5) Claimant Job Referral; (6) UI Agency Performance Metrics; (7) UI Agency Notices; (8) UI Agency Identification of Claimant Discrepancies; and (9) UI Agency Identification of Agency Discrepancies.

10 The first three of these reports are generated for employer 14. Fig. 10 depicts a screen shot of the Employer Balance Due Report that reports the outstanding balance of taxes owed by employer 14 to UI agency 18. Fig. 13 depicts a screen shot of the Employer Monthly Benefits Charge Statement that reports the benefits charged to employer 14. Fig. 14 depicts a screen shot of the Employer Determination of Benefits report that reports information to an employer about a
15 claimant's claim for benefits.

 The next two of these reports are generated for claimant 16. Fig. 15 depicts a screen shot of the Claimant Claim History report that reports the status of weekly claims filed by a claimant, including any overpayment of benefits or penalty on the account. Figs. 16A and 16B depict
20 screen shots of the Claimant Job Referral report that is automatically generated when a claimant files for benefits to provide job listings for the claimant.

 The final four of these reports are generated for UI agency 18 to monitor the status of UI system 12. The UI agency Performance Metrics report (not shown) reports data that permits supervisors to monitor the accuracy of the information provided by knowledge workers 19 and the number of claimants 16 and employers 14 who received assistance through UI system 12.
25 For each call, the Performance Metrics report may classify each caller as claimant or employer, classify the complexity of the call, state whether the call was transferred to a knowledge worker, and explain whether the knowledge worker was able to resolve the issues in one call or if a follow-up call was required. The UI agency Notices reports (not shown) automatically generates a list of claimants that have failed to provide periodic reports in order to facilitate follow-up in a
30 timely fashion. The UI agency Identification of Claimant Discrepancies report (not shown) identifies claimants who may have failed to report wages earned or failed to notify the UI agency

that they have obtained new work. This report facilitates an investigation to determine if an overpayment may have been made. The UI agency Identification of Agency Discrepancies report permits UI agency 18 to identify situations wherein information provided to other governmental organizations varies with the information provided to UI agency 18. This report facilitates an investigation to determine if a tax underpayment has been made by any employer.

FIG. 3 is a block diagram of a computer system 300 for implementing UI system 12. A standard computer system 300 (e.g. client/server configuration, personal computer) can be used to implement the functions of UI system 12 shown in FIGS. 1 and 2. Computer system 300 may include a computer 302 having a processor 304 and memory 306 capable of executing one or more programs to perform the functions of the of UI system 12. Computer 302 also is coupled to a database 308 for managing data associated with UI system 12. Computer system 300 can include a network interface (not shown) having hardware and software components to allow users access to UI system 12 over a network such as the Internet. The network interface may allow UI system 12 to receive and transmit information related to unemployment insurance. A keyboard 310 can be used to input information to computer 302 and a computer screen 312 can be used to display information from computer 302.

The following examples describe how UI system 12 manages some of the business functions of UI set forth in block 72 of FIG. 2.

Example 1: UI Benefits Claim Process

UI system 12 is capable of handling a claimant's 16 request for UI benefits by performing the following "UI Benefits Claim Process."

1. Claimant Terminates Employment with Employer. Claimant 16 ordinarily files a claim for UI benefits after terminating employment with an employer 14, while claimant remains unemployed.

2. Claimant Submits Initial Claim for UI Benefits. Under UI system 12, claimant 16 may submit an initial claim for UI benefits through one or more access channels 20. The following are examples of claim submission through various access channels.

a. Visit UI Office. Claimant 16 physically visits a local office of the UI agency 18 and completes and submits a paper application. The paper application can then be scanned by OCR/ICR module 50, as described in subparagraph (d), below. In an

alternative implementation, claimant 16 visits a local office and talks to knowledge worker 19, who enters necessary information on a form displayed on unified desktop 100. Using a series of edits, the unified desktop 100 will notify knowledge worker 19 if information is incomplete or patently inaccurate, permitting knowledge worker 19 to obtain additional or corrected information from claimant 16 at the time of submission.

b. Call Telephone Contact Center. Claimant 16 calls telephone contact center 30 to provide information to file a claim. In an implementation, claimant responds to prompts from IVR 33 to provide the necessary information to file a claim. The recorded information may be entered automatically using CTI 34. Since the information is not entered in “real time” into UI system 12, IVR 33 and CTI 34 are not always able to detect incomplete or inaccurate information. Therefore, UI system 12 will “flag” deficient claims and generate a report of claimants that have missing, incomplete or inaccurate information, in order to permit timely contact of these claimants by telephone, e-mail, or mail.

In another implementation, claimant 16 speaks directly with knowledge worker 19 to provide the required information, which knowledge worker 19 enters into unified desktop 100. As with a claim submitted in person, unified desktop 100 notifies knowledge worker 19 if information is missing, incomplete or patently inaccurate in order to permit the knowledge worker 19 to obtain the missing, incomplete or inaccurate information at the time of the initial call. This eliminates or reduces the need for call-backs to claimant 16, improving the operating efficiency of the UI system 12. Also, this speeds the processing of the claim and reduces the time until an eligible claimant can begin to receive benefits.

c. Submit Claim Through Internet. Claimant 16 visits the UI agency website run by web self-service center 40. Claimant 16 establishes a password protected user profile and submits the necessary information on a web-based form, such as the one depicted in FIGS. 5A-5H. As with the claims submitted in person or through telephone contact center 30, upfront edits on the web-based forms will check for incomplete, missing or inaccurate information and prompt the claimant for proper information before allowing submission of a claim.

d. Submit Claim Through Fax or Mail. Claimant 16 may submit the appropriate forms for filing a claim by sending the form to UI agency 18 through fax or mail, where the form will be scanned and processed by OCR/ICR module 50 into computer readable data. As with a claim submitted through IVR, claims submitted by fax or mail are not entered into UI system 12 in “real time.” Accordingly, UI system 12 will flag and provide a report of those fax or mail claims that have incomplete, missing, or inaccurate information so that those claimants can be contacted in a timely fashion.

3. Claim Processed and Saved in Unified Database. The information, as submitted by claimant 12, is reviewed for accuracy and completeness, as described above, and missing information is obtained from claimant 12. The data for the claimant’s claim is saved in unified database 81. Included among this data is contact information for the claimant’s previous employer for the next step in the process.

4. Former Employer Notified of Claim. Under many states’ laws, a claimant’s 16 employment during the most recently completed four quarters is used as the basis for determining eligibility for UI benefits and the amount of UI benefits that the claimant is due under the law. Claimant 16 is not automatically entitled to UI benefits by virtue of having terminated employment with a former employer 16. For example, claimant 16 is generally ineligible for UI benefits if he or she voluntarily quit or was fired with just cause.

Therefore, after claimant 16 submits a claim, UI system 12 facilitates notifying claimant’s 16 former employer 14 about the claim. Employer 14 then has an opportunity to verify the information provided by claimant 16, such claimant’s 16 dates of employment, the amount of wages paid to claimant 16 and the reason claimant 16 terminated employment with employer 14. Employer 14 may contest any of the information provided by claimant 16. UI system 12 is also used to verify that employer 14 received the claim information in a timely manner. If employer 14 fails to contest the information or fails to respond within a prescribed period of time, it may be assumed that employer 14 concurs with the information submitted by claimant 16.

In an implementation, reporting layer 90 generates a report of the relevant information based on the data stored in unified database 81. The report may be communicated to employer 14 through one or more of access channels 20, as described above. For example, the report may be sent by ordinary mail, electronic mail, facsimile transmission, or through web self-service

center 40. When sent through web self-service channel 40, the report may be similar to the one depicted in FIGS. 7A and 7B.

Employer 14 responds to the report through one or more of access channels 20, as described above. For example, employer 14 may communicate in person at the UI agency, by telephone (either IVR or by speaking with knowledge worker), by mail, by electronic mail, by facsimile, or over the Internet. In an alternative implementation, employer 14 may send separation information request 240, as shown in FIGS. 7A and 7B, to UI system 12 through web self-service center 40. UI system 12 will then verify that all information in employer's 14 response is complete and accurate, process employer's 14 response, and store the information in unified database 81.

5. Claim Status Updated and Claimant Notified. Business layer 70 is then implemented to determine whether claimant 16 meets the legal requirements to be found eligible for benefits, and if so, the amount and duration of those benefits, the commencement date, and the terms and conditions of receiving the benefits (e.g., must be actively seeking employment, must report all income, etc.). If employer 14 contests claimant's 16 claim, this determination may be adjusted based on employer's 14 contentions. At each step of the process, the claimant's 16 and employer's 14 files in unified database 81 are accessed and updated. In some instances, this determination may be made by execution of instructions in business layer 70. In other instances, knowledge worker 19 or another employee of UI agency 18 may assist in making a determination and manually update the records, such as through unified desktop 100.

Once a determination has been made, a report of the determination is generated by reporting layer 90 and is communicated to claimant 16 through access channels 20, such as through telephone, mail, electronic mail, facsimile, or over the Internet. Procedures may also be provided by law for claimant 16 or employer 14 to appeal an adverse decision. UI system 12 may facilitate processing requests for appeals in ways similar to processing the initial claims, as described above.

6. UI Benefits Issued. If claimant 16 is determined to be eligible for UI benefits, the amount of benefits is calculated by applying the applicable business logic to the wages data 84 stored in unified database 81. This information is then transmitted, for example, by external systems interface 76 to a state treasurer office, which prints and mails a check to claimant's 16 address stored in unified database 81. In another implementation, the benefits payment can be

transferred by electronic funds transfer (EFT), based on information submitted by claimant 16 and located in unified database 81. Once a payment is issued, claimant's 16 and employer's 14 records in unified database 81 are updated accordingly.

7. Claimant Submits Required Updates. Generally, under the law, claimant 16 must submit periodic updates to remain eligible for UI benefits. Required information generally includes information to support the assertion that the claimant 16 is actively pursuing job opportunities, reporting any income earned while collecting UI benefits, and other information needed for the UI agency to determine eligibility for continued benefits or amounts. Claimant 16 may submit this information using the access channels 20 as described in section (2), above. Such information is processed by business layer 70 and claimant's 16 file in unified database 81 is updated accordingly. Such information can be verified by former or prospective employers in the same manner as described in section (4), above.

If claimant 16 fails to provide the required updates in a timely fashion, UI system 12 may generate an automatic notice to claimant 16, which can be transmitted through access channels 20. An automatic notice can also be generated for knowledge worker 19, prompting a follow-up by telephone, e-mail, or mail.

8. Claimant No Longer Eligible for Benefits. Based on the update submitted in section (7), claimant 16 may become ineligible for benefits. Depending on the basis for terminating eligibility, various actions may be taken by the UI agency 18. Some of these reasons are described below.

a. Claimant Finds Employment. If claimant 16 finds employment, claimant 16 is required to notify UI agency 18, such as through UI system 12, and UI benefits automatically will be terminated. Claimant's 16 records and the records of the former employer and the new employer are updated in unified database 81 and benefit payments are terminated.

b. Expiration of Benefits Period. Under the law, eligibility for benefits may be limited to a finite amount of time. Depending on the status of the law, claimant 16 may become ineligible for further benefits or may become eligible for only reduced benefits. UI system 12 will automatically notify claimant 16 and knowledge worker 19 of expiration of the benefits period, through access channels 20, and will terminate or alter the benefits.

c. Failure to Actively Seek Employment. Generally, under the law, in order to continue receiving UI benefits, claimant 16 is required to submit periodically information demonstrating that he or she is actively seeking employment. Failing to comply with this requirement often will result in termination of UI benefits. UI system 12 permits UI agency 18 to efficiently and quickly monitor and follow-up on claimant reports of actively seeking employment in order to reduce the number of ineligible claimants being paid UI benefits and to help recoup overpayments of UI benefits.

d. Fraud. Generally, under the law, claimant 16 is required to inform UI agency 18 of any wages earned while collecting UI benefits. Failure to report this information may constitute fraud and may be grounds for terminating UI benefits. Some claimants attempt to commit fraud by failing to report employment with a new employer. That information is required to be reported by the new employer as part of providing information regarding payment of UI taxes (as described in Example 2, below). In the UI system 12, because the tax data is stored together with the benefits data in unified database 81, UI system 12 automatically cross checks tax data and benefit data on a continual basis to identify situations where a claimant is employed with a new employer while attempting to continue to collect UI benefits. UI system 12 then reports this information to claimant 16 and to knowledge worker 19 and terminates UI benefits. UI system 12 also may report this information to other government agencies through external systems interface 76, such as to facilitate prosecuting claimant 16 with criminal charges.

9. Review of Claim by UI agency. UI agency 18 may review UI benefit payments made to claimants 16 in order to determine if overpayments were made. As noted above, claimants 16 are required to report wages paid while collecting UI benefits and to notify UI agency 18 if they obtain new employment. UI system 12 enables UI agency 18 to review selected claims to determine when overpayments have been made. In instances where overpayments have been made, collection efforts are initiated by UI system 12. For example, as shown in FIG. 15, claimant 16 can be notified by web self-service center of overpayments. Claimant's 16 records in unified database 81 are automatically updated accordingly.

Example 2: UI Tax Process

UI system 12 handles employer UI tax payment requirements by performing the following UI Tax Process. This UI Tax Process provides a mechanism by which employers 14 provide employee wage information and submit UI tax payments. The following steps describe how UI system 12 assists in the timely collection and posting of proper payments.

1. Register Employer. Employer 14 must register with the UI agency 18 prior to reporting employees and wages and before the UI agency 18 can assess the proper tax. Registration can be performed over any of the access channels 20 described above in Example 1. For example, Figs. 6A to 6K depict employer registration form 230 that may be used by employer to register over the Internet through web self-service center 40.

2. Employer Notifies UI agency of New Employee. Generally, employer 14 is required by law to notify UI agency 18 of new employees. This information is used to calculate the amount of UI tax owed to UI agency 18 by employer 14. This information may be reported to UI agency 18 and input into UI system 12 through one or more of access channels 20, as described above with respect to Example 1. In some instances, this information may be reported to a government agency other than UI agency 18. In those instances, the other government agency can transfer the information to UI system 12 through external systems interface 76. The information is processed by UI system 12 and stored in unified database 81.

3. Employer Reports Wages. Employer 14 periodically reports wages paid to their employees in order to calculate the amount of UI tax due. This information may be reported to UI agency 18 and input into UI system 12 through one or more of access channels 20, as described above with respect to Example 1. For example, Fig. 9 depicts a form 260 for employer 14 to report the amount of wages paid to its employees over the Internet through web self-service center 40. This information may be reported in other media such as magnetic tapes, CD-ROMs, or diskettes. This information is processed by UI system 12 and stored in unified database 81. UI system 12 also permits verification of this information with information submitted by employer 14 to other government agencies, such as the Social Security Administration and the Internal Revenue Service. Thus, UI system 12 permits UI agency 18 to identify potential situations where information is not consistent in order to facilitate follow-up or audits.

4. Employer Pays UI Taxes. Based on the wages reported, employer's 14 UI tax liability is calculated by UI system 12. In addition to wages, UI system 12 also uses information

from unified database 81 regarding claimant's 16 claims for UI benefits to update employer's 14 status. The amount of UI tax due from employer 14 is impacted by UI benefits paid out to claimants 16 (former employees), credits that employer 14 may be eligible for, and past overpayments or underpayments. UI system 12 reports the amount of tax due to employer 14 through one or more of access channels 20, as described above. Employer 14, in turn, can pay the UI taxes through access channels 20. For example, FIGS. 10 and 13 show invoices sent through web self-service center 40 regarding the amount of tax due and FIG. 11 shows a web-based form allowing employer 14 to make an electronic payment of tax due.

5 5. Review of Amounts of UI Tax Due or Paid. Employer 14 or UI agency 18 may initiate a review of the proper amount of UI tax due or paid by employer 14. For example, UI agency 81 may initiate a review when abnormally high or low amounts appear to be due (when compared with the historical data), when a discrepancy is identified among external data sources (such as the Social Security Administration, the Internal Revenue Service, or the state tax authority), or based on a random selection for an audit. The use of unified database 81 facilitates this review by providing timely information about both taxes due by an employer and benefits paid to that employer's former employees.

10 It will be understood that various modifications may be made without departing from the spirit and scope of the claims. For example, advantageous results still could be achieved if steps of the disclosed techniques were performed in a different order and/or if components in the disclosed systems were combined in a different manner and/or replaced or supplemented by other components. Accordingly, other implementations are within the scope of the following claims.